We claim:

1. A blood treatment device comprising:

a treating means that performs a predetermined treatment to blood collected from a patient;

a measuring means that measures blood parameters and indicates the status of said blood of said patient;

a controlling means that controls treatment conditions based on said blood parameters measured using said measuring means;

a storing means that stores an ideal patient-specific blood parameter curve for a specific treatment duration; and

a directing means that compares said ideal parameter curve stored in said storing means with blood parameters measured with said measuring means, and that changes the control from said controlling means so that said measured blood parameters approximate to said ideal blood parameter curve.

2. The blood treatment device of claim 1, wherein said blood parameter is a hematocrit value indicating blood concentration or a rate of change of circulating blood volume derived from said hematocrit value.

3. The blood treatment device of claim 1 wherein:

said treating means is formed from a driving means for a blood purifying apparatus that purifies said blood of said patient while extracorporeally circulating said blood; and

said treatment condition controlled by said controlling means is selected from the group consisting of: water removal rate, blood flow rate, fluid substitution rate, concentration of dialyzing fluid, sodium ion concentration, blood treatment duration, flow rate of dialyzing fluid, temperature of dialyzing fluid, volume of substitution fluid, amount of drug injected, rate of drug injection, or combinations thereof.

4. The blood treatment device of claim 1, wherein said ideal blood parameter curve is corrected based on a blood parameter measured by said measuring means at the start of blood treatment.

5. The blood treatment device of claim 1, wherein said directing means varies a change in control of said controlling means based on a deviation between said ideal blood parameter curve and said blood parameter measured by said measuring means.

6. The blood treatment device of claim 1, wherein said ideal blood parameter curve stored in said storing means is an approximation equation calculated from an ideal blood parameter curve obtained from a previously performed blood treatment.

7. The blood treatment device of claim 1, wherein, when said blood parameters measured by said measuring means undergo an abrupt change, a direction to change from said directing means is overridden in such a way as to suppress said abrupt change.

8. The blood treatment device of claim 1, wherein said treatment duration is one of said parameters when said directing means directs said controlling means to change.

9. The blood treatment device of claim 1, wherein:

an absolute base line is established against said blood parameters; and

control by said directing means is overridden when said blood parameters fall below said absolute base line.

10. A blood treatment device comprising:

a treating means that performs a predetermined treatment to blood collected from a patient;

a measuring means that measures blood parameters and indicates the status of said blood of said patient; and

a controlling means that controls treatment conditions based on said blood parameters measured using said measuring means.

11. A blood treatment method using the blood treatment device of claim 10, comprising the following steps:

obtaining an ideal blood parameter curve prior to blood treatment that is specific to a treatment duration considered ideal for a particular patient;

changing the control of said controlling means when said treating means is to perform a predetermined treatment for said particular patient, so that blood parameters measured by said measuring means approximate said ideal blood parameter curve.

12. The blood treatment method of claim 11, wherein said blood parameter is a hematocrit value indicating blood concentration or a rate of change of circulating blood volume derived from said hematocrit value.

13. The blood treatment method of claim 11, wherein:

said treating means is formed from a driving means for a blood purifying apparatus that purifies said blood of said patient while extracorporeally circulating said blood; and

said treatment condition controlled by said controlling means is selected from the group consisting of: water removal rate, blood flow rate, fluid substitution rate, concentration of dialyzing fluid, sodium ion concentration, blood treatment duration, flow

rate of dialyzing fluid, temperature of dialyzing fluid, volume of substitution fluid, amount of drug injected, rate of drug injection, or combinations thereof.

14. The blood treatment method of claim 11, wherein said ideal blood parameter curve is corrected based on blood parameters measured by said measuring means at the start of blood treatment.

15. The blood treatment method of claim 11 further comprising a directing means that varies a change in control of said controlling means based on a deviation between said ideal blood parameter curve and said blood parameter measured by said measuring means.

16. The blood treatment method of claim 11, wherein:

an approximation function is calculated based on an ideal blood parameter curve obtained from a previously performed blood treatment; and

control by said controlling means is changed so that blood parameters measured by said measuring means approximate said approximation equation.

17. The blood treatment method of claim 11, wherein, when said blood parameters measured by said measuring means undergo an abrupt change, a direction to

change from said directing means is overridden in such a way as to suppress said abrupt change.

18. The blood treatment method of claim 17, wherein said directing means is overridden by said controlling means, which changes the control to approximate the measured hematocrit value to the ideal blood parameter curve.

19. The blood treatment method of claim 11, wherein said treatment duration is one of said parameters when said directing means directs said controlling means to change.

20. The blood treatment method of claim 11, wherein:

an absolute base line is established against said blood parameters; and

control by said directing means is overridden when said blood parameters fall below said absolute base line.

21. The blood treatment method of claim 20, wherein said directing means is overridden by said controlling means, which changes the control to approximate the measured hematocrit value to the ideal blood parameter curve.